



Name - \_\_\_\_\_

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## Forecasting Precipitation Activity

### Introduction:

Forecasting precipitation requires the consideration of many factors. It is important to consider sources of moisture and lifting mechanisms in the development of precipitation.

### Forecasting Scenarios:

For the following weather scenarios, indicate if precipitation is "likely" or "unlikely" to occur given the conditions described in each scenario. **Explain why.**

Weather Scenario	Likely or Unlikely	Precipitation? Explain Why
<b>Example Scenario:</b> Boulder, CO, a city on the east side of the Rockies. Downslope winds are expected.	<b>Unlikely</b>	Downslope winds (or wind blowing down the mountain) tend to be very dry, warming as it descends, creating an unfavorable environment for the development of precipitation (since rising air in the presence of downslope winds is unlikely).
<b>Scenario 1:</b> A cold front is approaching from the west, but the air both ahead of and behind the front is very dry.		
<b>Scenario 2:</b> A warm front is approaching and the air behind and ahead of the front is very moist.		
<b>Scenario 3:</b> Upslope winds are expected in Boulder, CO and the air has been very moist for the past couple of days.		
<b>Scenario 4:</b> The trend for the latest batch of precipitation is a steady eastward movement of 30 miles/hour. The latest position is roughly 700 west of here. Will precipitation arrive within 24 hours?		